PROCEEDINGS

OF THE

ACADEMY OF NATURAL SCIENCES

OF

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NEW SERIES.

PART I. 1871.

JANUARY 3, 1871.

Mr. WM. S. VAUX, Vice-President, in the chair.

Twenty-four members present.

The following paper was presented for publication:—

"Notes on the Natural History of Fort Macon, N. C., and vicinity. No. 1." By ELLIOTT COUES.

PROFESSOR O. C. MARSH, of Yale College, exhibited a tooth of a new species of *Lophiodon*, from the Miocene of New Jersey, which was the first indication yet discovered of remains of the Tapiridæ on the Atlantic coast, or of the genus *Lophiodon* in this country, east of the Rocky Mountain region. The tooth, which was in a perfect state of preservation, was the first true molar of the left upper jaw. It measured across the crown seven lines in antero-posterior diameter, and eight and one-quarter lines in transverse diameter. This would indicate an animal intermediate in size between *L. occidentalis* and *L. modestus* of Dr. Leidy. From the latter species it may readily be distinguished by the enamel of the crown, which is smooth and not wrinkled. As this species is evidently distinct from any described, Professor Marsh proposed for it the name *Lophiodon validus*. The specimen was found in the miocene marl of Cumberland County, New Jersey, and appa-

rently at about the same horizon as the *Elotherium Leidyanum*, and *Rhinoceros matutinus* Marsh, from Monmouth County, in the same State.

JANUARY 10.

Mr. WM. S. VAUX, Vice-President, in the chair.

Thirteen members present.

JANUARY 17.

Dr. CARSON, Vice-President, in the chair.

Twenty-five members present.

JANUARY 24.

Mr. VAUX, Vice-President, in the chair.

Eighteen members present.

Mr. THOMAS MEEHAN presented a fruit of a pear, which presented the external appearance of an apple, gathered from a Tyson pear tree growing in the garden of Dr. Lawrence, of Paris, Canada. Dr. Lawrence had a Rhode Island greening apple near the pear tree, and some of the latter interlaced with it. The pear tree was full of blossoms last spring, but only those interlacing bore fruit. They had all the appearance of apples, so much so, that many who had seen them had supposed there must have been some mistake as to Dr. Lawrence gathering them. Dr. L. had, however, when he first saw them, obtained Mrs. Lawrence's aid in separating the branches, so that there should be no mistake. The specimens had been sent to Mr. Meehan, who regarded them as apples; but on cutting them open, found the seeds to be of the pear. The granular matter characteristic of the pulp of the pear also existed in the carpels, but none in the pulp, which was wholly fibrous, as in the apple; the insertion of the stalk, also, was that of the pear. Instead of the cavity being funnel-form, as in the apple, it was campanulate, as if the stem had been pushed in, carrying the epidermis and pulp with it. He had no doubt that the fruit had the pedicle, carpellary walls, and seeds of the pear, with the granular pear-pulp wanting; but with the fibrous pulp and epiderm of the apple.

As to the law of its production, he disliked speculation, but it would seem that there were two ways in which it might be produced—either by a natural evolution of form, independent of sexual influence, which plants at times exhibited, or by cross-